



DEPARTMENT OF THE ARMY
U S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT
FORT SHAFTER, HAWAII 96858-5440
May 29, 2009

REPLY TO
ATTENTION OF:

Regulatory Branch

Corps File No. POH-2007-00127

Mr. Wayne Y. Yoshioka
Director, Department of Transportation Services
City and County of Honolulu
650 South King Street, 3rd Floor
Honolulu, Hawaii 96813

Dear Mr. Yoshioka:

The U S. Army Corps of Engineers (Corps) received your request dated May 12, 2009 for our jurisdictional determination (JD) on the **Honolulu High-Capacity Transit Corridor Project** (Project) located within an approximate 20-mile corridor between East Kapolei and Ala Moana on the Island of Oahu, Hawaii. As you know, an approved JD is an official Corps determination that jurisdictional "waters of the United States", or "navigable waters of the United States", or both, are either present or absent on a particular site. An approved JD precisely identifies those limits of these waters on the project site or within the study area determined to be jurisdictional under Section 404 of the Clean Water Act (CWA) and/or Section 10 of the Rivers and Harbors Act (RHA) of 1899. An approved JD does not, however, include any determinations that a particular activity requires a Department of the Army (DA) permit.

Your letter was accompanied by a report entitled "*Wetland and Waters of the United States Study, Honolulu High-Capacity Transit Corridor Project*" (herein "Report") that was prepared by Oceanit in collaboration with Parsons Brinckerhoff (PB) for the City and County of Honolulu, Department of Transportation Services (DTS). In your correspondence, you acknowledge field data were still being collected and/or synthesized with respect to the ordinary high water mark (OHWM) for non-tidally influenced (freshwater) water bodies occurring within the Project corridor area. Subsequent to your initial letter, we received a second submittal on May 22nd from PB that contained a summary table of the OHWM data, an updated Report with an errata sheet correcting several errors, a set of preliminary engineering plans, and the plan and profile sheets for the stream crossings.

The Corps has reviewed the Report and supplemental documents furnished to our office, and finds they are sufficient for purposes of determining Corps jurisdiction for non-wetland waters of the United States, but not the precise scope and lateral extent of our geographic jurisdiction in accordance with existing Federal policy and regulation. The attached enclosure addresses our preliminary comments, including a request for the submittal of the wetlands field data sheets. Please note that the wetlands field data sheets are a mandatory element of all wetland delineations performed under the Corps of Engineers' established technical requirements and that we cannot issue any associated JD without those submittals in hand. Upon a more thorough review of the materials, the Corps may require additional and/or clarifying information from your consultant team.

It is the Corps' goal to process a JD request within 60 calendar days. In the interim, we look forward to receipt of the requested information and continued coordination with DIS, PB and Oceanit. Should you have any questions or need additional information, please contact Ms. Susan A. Meyer, Regulatory Project Manager, at (808) 438-2137 or via electronic mail at susan.a.meyer@usace.army.mil

Sincerely,



George P. Young, P.E.
Chief, Regulatory Branch

Enclosure

Copy Furnished (w/encl):
Mr. Ted Matley, Federal Transit Administration

INTRODUCTION:

Based on the project description contained in the May 12, 2009 *Wetland and Waters of the U.S. Study* (herein “Report”) submitted to our offices on May 13, 2009, it appears that the Honolulu High Capacity Transit Corridor Project (Project) will likely impact one or more sites that are under the Corps’ regulatory jurisdiction. Therefore, we are providing the background discussion to reiterate the Section 404 of the Clean Water Act (CWA) and Section 10 of the Rivers and Harbors Act (RHA) of 1899 limits of jurisdiction with the goal of assisting the applicant and its agent in developing an acceptable jurisdictional delineation report for the Corps’ verification, and ultimately, for the issuance of an approved jurisdictional determination. In addition, this enclosure provides detailed comments on the Report itself, although they are in no way exhaustive.

BACKGROUND:

Regulatory Framework

The Corps’ geographic jurisdiction under Section 10 of the RHA of 1899 (33 U.S.C. 401 *et seq.*) includes all navigable waters of the United States which are defined in Federal regulation at 33 C.F.R. Part 329 as: “those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce.” This jurisdiction extends seaward to include all ocean waters within a zone three nautical miles from the coast line. The shoreward limit of jurisdiction for activities that occur within, over, under or affecting tidally influenced Section 10 waters is the mean high water mark¹.

The CWA of 1972 (33 U.S.C. 1344) uses the term “navigable waters”, which is defined as “waters of the United States, including the territorial seas.” Activities or projects requiring Section 404 of the CWA authorization are limited to discharges of dredged or fill materials into the waters of the United States. For purposes of Section 404 of the CWA, the lateral limits of jurisdiction over non-tidal water bodies extend to the OHWM², in the absence of adjacent wetlands. When adjacent wetlands are present, CWA jurisdiction extends beyond the OHWM to the limits of the adjacent wetlands. For purposes of Section 10 of the RHA of 1899, the lateral extent of Federal jurisdiction is limited to the traditional navigable waters of the United States, which extends to the OHWM, whether or not adjacent wetlands extend landward of the OHWM.

¹ Where precise determination of the actual location of the “mean high water” line is necessary, it must be established by survey with reference to the available tidal datum, preferably averaged over a period of 18.6 years. Less precise methods, such as observation of the “apparent shoreline”, which is determined by reference to physical markings, lines of vegetation, or changes in type of vegetation, may be used only where an estimate is needed of the mean high water line.

² Corps regulations define the term “OHWM” for purposes of the CWA lateral jurisdiction as: “that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider characteristics of the surrounding areas” (33 CFR 328.3(e))

Summary of
U.S. Army Corps of Engineers Regulatory Jurisdiction

TIDAL WATERS		FRESH WATERS	
Section 404 Jurisdictional Line	Section 10 Jurisdictional Line	Section 404 Jurisdictional Line	Section 10 Jurisdictional Line
High Tide Line	Mean High Water	OHWM	OIWM
<p><u>Section 404 of the CWA:</u> the discharge of dredged or fill material, including but not limited to all filling activities, utility lines, outfall structures, road crossings, beach nourishment, riprap, jetties, etc.</p> <p><u>Section 10 of the RHA:</u> all structures and work within, over, under or affecting the water body, which includes but is not limited to dredging, marinas, piers, wharves, floats/docks, intake/withdrawal pipes, pilings, bulkheads, ramps, fills, overhead transmission lines, submarine dabbles, etc.</p>			

Rapanos Guidance for Non-Relatively Permanent Waters (RPWs)

As a result of the June 2006 Supreme Court decision concerning Section 404 of the CWA jurisdiction (*Rapanos v. United States*) and the subsequent promulgation of joint Corps and U.S. Environmental Protection Agency (EPA) guidance, the Corps asserts jurisdiction over the following categories of water bodies:

- Traditional navigable waters (TNWs);
- All wetlands adjacent to TNWs; and
- Non-navigable tributaries of TNWs that are relatively permanent and wetlands that directly abut such tributaries.

In addition, the Corps asserts jurisdiction over every water body that is not a relatively permanent water body (RPW) if that water body is determined to have a "significant nexus" with a TNW. The latter determination requires a case- or fact-specific analysis by the Corps and coordination with EPA. Non-RPWs include non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally, wetlands adjacent to such tributaries, and wetlands adjacent to, but that do not directly abut a relatively permanent, non-navigable tributary. A significant nexus exists if the tributary, in combination with all of its adjacent wetlands, is found to have more than a speculative or an insubstantial effect on the chemical, physical and/or biological integrity of a TNW.

Jurisdictional Delineation/Determination Process

In general, for third-party prepared jurisdictional delineation reports, the Corps reviews and verifies the information submitted by the applicant/agent/consultant to ensure the data adequately characterize the field conditions and that the limits of jurisdiction are appropriately identified and mapped. If the draft report is incomplete, additional information will be requested in order to resume the review process. The Corps may elect to perform an on-site field

verification prior to making a final determination of jurisdiction. A relatively new, but integral part of the JD process is the completion of a JD form for each site or water body encountered. The policy directive to use the JD forms and include case-specific analyses (e.g., contributions of non-RPWs to the downstream biological, chemical and/or physical integrity of TNWs) stems from the Rapanos Supreme Court decision. In some instances, such as when a "significant nexus evaluation" is undertaken for a non-RPW or an isolated wetland determination is made, the JD form and supporting documentation must be furnished by the Corps to the EPA Regional office and/or EPA's Headquarters office for review and concurrence prior to the issuance of a final JD. Because of the increased coordination and sometimes onerous analytical requirements resulting from the Rapanos guidance, a copy of the JD form was furnished to Oceanit and Parsons Brinckerhoff to assist in collecting and synthesizing pertinent field data and studies that could facilitate the Corps' independent significant nexus evaluation(s) for any non-RPWs occurring within the Project study area and/or any isolated wetlands or other waters of the U.S. determinations.

It should be noted that the content and completion of the JD forms, as well as the rationale documented for each jurisdictional determination, is the sole responsibility of the Corps. Once a JD is finalized, the JD forms are posted to the Corps' website for purposes of public disclosure and consistency for the regulated public.

GENERAL COMMENTS:

Existing information, data sources and scientific studies are commonly used to assist a wetlands delineator in determining appropriate field sampling locations for performing an on-site delineation and in helping to demarcate the boundaries of waters of the United States. Examples of such sources include, but are not limited to: U.S. Fish and Wildlife Service National Wetlands Inventory (NWI) maps, U.S. Soil Conservation Service hydric soil maps, U.S. Geological Service (USGS) topographic quadrangle maps, aerial photography or other imagery, watershed studies, hydraulic studies, USGS stream gage data, tidal datum, tide charts, etc. These data sources are intended to facilitate field reconnaissance studies, select appropriate site sampling locations, and generally assist in the field delineations, but individually are not intended to be relied upon to render a final JD—and in the case of wetlands, such sources are not to be used in lieu of a three-parameter delineation.

For non-wetland waters, a discernable OHWM must be present and appropriately documented. The JD must document in writing the physical characteristics used to establish the OHWM for CWA and/or RHA jurisdiction. If physical characteristics are inconclusive, misleading, unreliable or not evident, the written documentation must include information about the physical characteristics (or lack thereof) and other appropriate means that consider the characteristics of the surrounding areas, which was used to determine the OHWM. To complete an approved JD, there must be complete and accurate documentation that substantiates the Corps decision. At a minimum, decisions must be documented using the JD form and the documentation provided must allow for a reasonably accurate replication of the determination at a future date. In this regard, documentation will normally include information such as data

sheets, site visit memoranda, maps, sketches, and in some cases, surveys and photographs documenting the OHWM.

For wetlands, a boundary must be determined based on the methodology outlined in the Corps 1987 *Wetlands Delineation Manual*. All wetlands delineation reports submitted to the Corps for review and approval must include the Corps-approved Routine Wetland Determination data forms that are part of the Corps 1987 *Wetlands Delineation Manual*. For each wetland sample site, a data sheet must be completed, which documents the location of the site, general field conditions, presence/absence of hydrophytic vegetation, presence/absence of hydrology and presence/absence of hydric soils. No wetlands delineation will be accepted without these data sheets. That is, it does not suffice to conclude in the text of the report that no hydric soils were present, therefore no wetlands are present. Rather, data sheets must be completed to document the findings of each soil pit dug, and what was observed by the delineator, including site-specific information such as the soil profile description (e.g., depth, matrix color, texture, redox features, etc.) Each soil pit dug at a site should be geo-referenced or otherwise marked/flagged to allow for follow-up field examination/verification, if needed. Similar data must be collected and documented in the approved forms for vegetation and hydrology.

All waters of the U.S. must be depicted on a map or series of maps at an appropriate scale to illustrate their geographic or spatial boundaries. Accurate mapping is needed for field verification purposes and documentation for the Corps administrative record (note: a geographic ID is valid for five years unless new information warrants revision of the determination prior to the expiration date). Detailed mapping is also needed to assist the applicant in designing or modifying alternatives to avoid and/or minimize impacts to aquatic resources, as well as to facilitate the calculation or quantification of unavoidable project impacts. The latter, of course, is a prerequisite to determining the appropriate type of DA permit and associated pre-construction notification requirements. Accordingly, whenever possible, visual representation of the jurisdictional aquatic features should be provided to identify the lateral extent or limit of jurisdiction (e.g., color coded, hatching, shading, etc. on a topographic map or aerial photograph). In addition, the text should include a discussion of the tributary or water body connections to traditionally navigable waters (TNWs), which in this case is the Pacific Ocean. We noted a number of the discussions in Section 5.0 include a description of the hydrologic connections, however, a description for every water body should discuss the flow characteristics, wetland adjacency (if applicable) and hydrologic connections (e.g., Wetland A is adjacent to unnamed tributary #5, which flows into a perennial stream that flows through a box culvert at Main Street bridge before its confluence with the Pacific Ocean).

SPECIFIC COMMENTS:

Section 1.0 Executive Summary

Page 1; paragraph 2: The last two sentences of this paragraph should be stricken, as follows: ~~"Judging where a stream ends and where land begins is not, however, a simple matter. One of the more important limitations in the context of this report is that jurisdiction does not extend to prior converted cropland nor to any stream that does not have an outlet to the ocean."~~

Page 1; paragraph 3: Revise the first two sentences as follows: “... Waiau Springs (Site 15) ~~could be defined as a traditional~~ meets the definition of a wetland, however tThe Project right-of-way, including all construction-related activities, will avoid direct impacts to this site. The elevated guideway ~~passes this wetland in an alignment~~ will be located down the middle of Kamehameha Highway over an existing culvert crossing and therefore will not encroach into the Waiau Springs.”

Page 1; paragraph 4: Delete the entire paragraph.

Page 1; paragraph 5: Insert the words “Section 10 of” prior to “the Rivers and Harbors Act...”. In addition, modify the last sentence accordingly: “The shoreline margins of several of these sites ~~are also near to being defined as wetlands due to the overgrowth of mangroves causing the accumulation of soils with wetland potential along the banks~~ support dense stands of mangrove. Field observations and examinations further indicate the accumulation of sediments within the mangrove, which were determined to be hydric soils (or not?) based on _____ (insert what hydric soil indicators were present—or not).”

Page 2; paragraph 1: Delete the entire paragraph.

Page 2; paragraph 2: Correct the citation for the “... Clean Water Act (USC 1948)”. In addition, correct all legal citations with respect to the Clean Water Act of 1972 and Rivers and Harbors Act of 1899 throughout the Report. If need be, reference our citations herein.

Page 2; paragraph 3: Delete the entire paragraph.

Page 3; Table 1 (Sites Examined for Study): While it is helpful to include a table that lists and organizes all the sites (water bodies) encountered within the study area, the information contained in this table is not particularly useful nor accurate for establishing Corps jurisdiction and/or quantifying impacts to waters of the U.S. Instead, more helpful information would include the following:

- Coordinate data (e.g., lat/long) for each site;
- Type of flow (e.g., perennial, seasonal, non-RPWs, such as ephemeral);
- Whether the stream/channel invert is natural or concrete-lined;
- Whether the site is tidally influenced; and
- The type of impact expected (e.g., Section 404—discharge of dredged or fill material v. Section 10—work in, over or affecting tidally influenced water bodies)

Section 3.0 Introduction

Page 9; paragraph 3: Delete the entire paragraph, as portions are incorrect and the discussion is not germane to the JD.

Page 10; paragraph 1: The statement made about establishing the OHWM using “...the ‘bank full’ flow line attained by streams on the average of every 2 out of 3 years” fails to present a hydrologically defensible basis for establishing an OHWM in addition to being unsubstantiated in the follow-on statement: “...[t]his study follows the procedures outlined in the USACE *Jurisdictional Determination Form Instructional Guidebook* (USACE 2007).” Please clarify or else delete.

Page 10; paragraph 3: Delete all but the last sentence.

Section 4.0 Methodology

Page 13; paragraph 1: We request the Methodology (Section 4.0) discussion clarify and expand upon the field methodology utilized for this project study area. For example, it appears that the *Hawaii Wetland Field Guide* (Erickson and Puttock 2006) was used to classify wetland plants. If so, this is not an acceptable source; the Corps officially uses and accepts only the U.S. Fish and Wildlife Service National Lists of plant species to classify wetland plants (and the associated Regional updates). The scientific names and indicator status may differ if using another source. Similarly, the discussion on page 13 references the Corps 2007 *Jurisdictional Determination Form Instructional Guidebook*, which provides guidance on completing the Corps internal JD form and for conducting an approved JD, but it does not prescribe field methodology for delineations. The Guidebook is applied by the Corps to make and document approved jurisdictional determinations based on the case-specific information gathered from the field delineations that are performed by either a third-party delineator (consultant) or Corps staff.

Please explain how disturbed sites were considered with respect to determining the presence/absence of wetlands and whether the procedures outlined in the 1987 *Wetlands Delineation Manual* for atypical or problem areas were applied. Also, elaborate on the procedures that were used for characterizing and delineating the potential wetlands occurring within or adjacent to the proposed Project maintenance facility near Leeward Community College. Sites that are greater than five (5) acres in size require the application of a different field methodology. Based on our review of the Report, it was not apparent whether the appropriate methodology was used for the larger (> 5 acres) sites.

Page 13; paragraph 1: Clarify whether the buffer is 250 feet from the centerline of the crossing or 250 feet from either edge of the right-of-way. How wide will the crossing (i.e., guideway right-of-way) typically be?

Page 14; paragraph 1: In this section of the Report, the text indicates: “...preliminary soil pits were dug to make an initial assessment as to the presence or absence of hydric or anaerobic soils.” The text further explains that if all three indicators were present (i.e., hydrophytic vegetation, hydrology and hydric soils), then a second site visit was conducted to “...conduct thorough soil testing...” Based on the Corps-approved wetlands delineation methodology, there is no such thing as “preliminary soil pits” versus “thorough soil testing”. In any case, field data sheets must be completed by the field delineator(s) and submitted with the Report to document the findings.

Page 14; paragraph 2: The document reports that part of the methodology employed by the delineator(s) to determine hydric soils was "acid reactivity" Is this reference meant to specify that an $\alpha\alpha$ dipyridyl test was used? If so, who prepared the mixture and what was the date the alpha-alpha dipyridyl dye was mixed?

Section 5.0 Results

The discussions and site photographs provided in Section 5.0 of the Report are generally helpful and in most cases provide relatively thorough descriptions of the field conditions encountered and observations made by the delineator(s). However, as mentioned previously, field data sheets must be submitted to substantiate any claims regarding the presence/absence of hydric soils, hydrophytic vegetation and/or hydrology. Similarly, field data and appropriately labeled maps and photographs should be submitted to document the presence/absence of an OHWM, where applicable, and the high tide line or mean high water mark for tidally influenced waters.

While we found many portions of the "Site Description" and "Regulatory Jurisdiction Conclusions" informative, the discussions also raise a number of questions and concerns regarding the interpretation of field data. Again, the importance of the submittal of field data sheets cannot be understated. Conclusions made with respect to jurisdictional boundaries, including wetlands, are especially important given the current status of the Project's engineering design and uncertainties related to the final size, configuration and siting (placement) of park and ride features and stations. We understand from meeting conversations with Parsons Brinckerhoff that the vast majority of the guideway will be located within existing right-of-way and will span or otherwise avoid most waterways. However, based on the Corps review of the aerial photographs provided within the Report, it appears some of the stations and associated park and ride project features may be located in, over, or immediately adjacent to jurisdictional waters of the U.S. (e.g., Pearl Highlands Station and associated Park & Ride with respect to the Waiawa Stream, stations located at Kalihi Stream, etc.). For this reason, an accurate and appropriately scaled base map illustrating the boundaries of all jurisdictional waters of the U.S. should be included in the Report. Furthermore, such information and mapping should be officially provided by DTS to the selected design-build contractor to ensure the protection of aquatic resources during final project design, construction mobilization, project implementation, demobilization and long-term maintenance and operation.

The detailed comments that follow are offered only to represent the general types of concerns identified during the Corps' review, but are not all-inclusive. Upon receipt of an amended draft JD report, the Corps would expect to provide a more thorough set of review comments.

Page 79 (Site 11): Both the discussion in the text and the associated aerial photograph depict two sample sites: 11a and 11b. However, the accompanying site photographs on pages

80 - 81 label a number of additional sites, specifically 11c – 11g. Please clarify. Moreover, the coastal salt marsh and high tide line should be delineated along the Pearl Harbor (Middle Loch) shoreline, as the Corps understands an outfall structure may be constructed as part of the maintenance and storage facility that could impact jurisdictional waters of the U.S. occurring in this area.

Page 83 (Site #12): The Corps will need to review the field data sheets for this site. Furthermore, it is unclear how the OHWM was established, as the text explains “[A] flood bench indicating the ordinary high water mark is present, typically on both banks...” We are unfamiliar with the term “flood bench”, particularly in the context of a primary or secondary field indicator of an OHWM. Perhaps all that is necessary is a brief clarifying statement as to what is meant by “flood bench”.

Page 104 (Site 15): The Report indicates the “[Waiau] wetland was delineated on April 16, 2009 and a separate report covers that activity.” Please designate when this separate report will be submitted to the Corps. Upon submittal, it is imperative that the document include all field data sheets, sample site location information (e.g., flagging, lat/long point data, etc.) to identify boundaries and locations where soil pits were dug, and any other pertinent field information, including site photographs.

Page 137 (Site 20): We assume the mapped boundary (shown by a red dashed line) represents the high-tide line, but the legend should be clarified to explain what is meant by “shoreline boundary of estuary wetland”. The Corps also suggests consideration be given to expanding the field investigations, as the wetland boundary may extend beyond the high tide line. Were any vegetative data collected or soil pits dug beyond the high-tide line to confirm the presence/absence of adjacent wetlands?

In summary, we request you re-submit for our verification a revised jurisdictional delineation report that follows the criteria set forth in the Corps 1987 *Wetlands Delineation Manual* and the criteria for establishing an ordinary high water mark defined at 33 C.F.R. 320.3(e) for non-wetland waters of the U.S. The revised Report must include all wetlands field data sheets that were completed by the delineator(s). In addition, the revised report must address the field indicators observed/used to demarcate the lateral limits of non-wetland waters of the U.S. based on the presence of an ordinary high water mark (OHWM) for non-tidal waters.